

In the claims:

For the convenience of the Examiner, all claims being examined, whether or not amended, are presented below.

✓
Please cancel claim 14 without prejudice.

C2
13. (Amended) A method for altering the glucose-responsiveness of a pancreatic islet or cell, comprising administering to the pancreatic islet or cell a PYY Therapeutic, thereby altering the glucose-responsiveness of the pancreatic islet or cell.

C3
15. (Amended) The method of claim 13, whereby administration of the PYY Therapeutic causes the islet or cell to produce insulin when treated with glucose.

16. The method of claim 13, wherein the islet is a fetal islet.

17. The method of claim 13, wherein the cell is a fetal pancreatic cell.

18. The method of claim 13, wherein the islet is a postpartem islet.

19. The method of claim 13, wherein the cell is a postpartem cell.

20. (Amended) The method of claim 13, wherein the cell is a pancreatic β cell.

C4
21. (Amended) A method for altering glucose metabolism in an animal identified as having a disease associated with abnormal glucose metabolism, comprising administering to the animal a therapeutically effective amount of a composition including a PYY Therapeutic, thereby altering glucose metabolism in the animal.

22. The method of claim 21, wherein said PYY Therapeutic induces or enhances the glucose responsiveness of a pancreatic islet or cell.

C5
23. (Amended) A method for treating a disease associated with altered glucose metabolism, comprising administering to an animal identified as having a disease associated with altered glucose metabolism a therapeutically effective amount of a composition comprising a PYY Therapeutic, in an amount sufficient to increase the glucose responsiveness of a pancreatic islet or cell.

C6
25. (Amended) A method for treating a disease associated with altered glucose metabolism, comprising administering to an animal a therapeutically effective amount of a composition comprising glucose responsive islets or cells obtained by the method of claim 13, 14, 15, 17, 19 or 20.

26. The method of claim 25, wherein said composition further comprises a PYY Therapeutic.

27. The method of claim 26, wherein said composition is conjointly administered either simultaneously, sequentially or separately with a PYY Therapeutic.

C7
28. (Amended) The method of claim 23, wherein said disease is associated with a condition selected from [the group consisting of] insulin resistance, glucose intolerance or glucose non-responsiveness, hyperglycemia, obesity, hyperlipidemia and hyperlipoproteinemia in a subject.

29. (Amended) The method of claim 23, wherein said disease is Type II diabetes mellitus (NIDD).

30. (Amended) The method of any one of claims 13-20, wherein said PYY Therapeutic is administered together with a dipeptidylpeptidase inhibitor, insulin, or GLP-1.

31. (Amended) The method of any one of claims 13-20, wherein said PYY Therapeutic is conjointly administered either simultaneously, sequentially, or separately with a dipeptidylpeptidase inhibitor, insulin, or GLP-1.

32. (Amended) The method of claim 30, wherein said dipeptidylpeptidase is DPIP.

C7
C8 NT
33. (Amended) A method for maintaining or restoring a function of pancreatic β cells, comprising:

administering to a pancreatic islet or cell a composition comprising a PYY Therapeutic, thereby maintaining or restoring a function of pancreatic β cells.

34. (Amended) The method of any one of claims 13-20, wherein said therapeutic is a small organic molecule.

35. (Amended) The method of any one of claims 13-20, wherein said composition further comprises an agent capable of inhibiting the degradation of a PYY Therapeutic.

36. (Amended) The method of any one of claims 13-20, further comprising administering to an animal an agent capable of inhibiting the degradation of a PYY Therapeutic either simultaneously, sequentially or separately with said PYY or a PYY agonist.

37. The method of claim 34, wherein said agent is co-administered with the PYY Therapeutic.

C8 NT
39. (Amended) The method of any of claims 13-20, wherein said PYY Therapeutic enhances or recovers glucose responsiveness.

C9 NT
45. (Amended) A method for maintaining or restoring normal pancreatic islet function, comprising administering to a cultured pancreatic islet or cell a PYY Therapeutic, thereby maintaining or restoring normal pancreatic islet function.

46. The method of claim 45, where in said pancreatic islet is a failing β cell.

C10 NT
50. (Amended) The method of claim 21, wherein said animal is a human.

51. A method of claim 13, wherein administering the PYY Therapeutic causes maturation of said pancreatic islet or cell.

52. A method of claim 13, wherein said pancreatic islet or cell is a stem cell.

Please add the following new claims:

- C 11
53. (New) The method of claim 17, wherein the cell is a pancreatic β cell.
54. (New) The method of claim 19, wherein the cell is a pancreatic β cell.
55. (New) The method of claim 25, wherein said disease is associated with a condition selected from insulin resistance, glucose intolerance or glucose non-responsiveness, hyperglycemia, obesity, hyperlipidemia and hyperlipoproteinemia in a subject.
56. (New) The method of claim 25, wherein said disease is Type II diabetes mellitus (NIDD).
57. (New) The method of claim 21, wherein said composition further comprises a dipeptidylpeptidase inhibitor, insulin or GLP-1.
58. (New) The method of claim 21, wherein said composition is conjointly administered either simultaneously, sequentially or separately with a dipeptidylpeptidase inhibitor, insulin or GLP-1.
59. (New) The method of claim 23, wherein said composition further comprises a dipeptidylpeptidase inhibitor, insulin or GLP-1.
60. (New) The method of claim 23, wherein said composition is conjointly administered either simultaneously, sequentially or separately with a dipeptidylpeptidase inhibitor, insulin or GLP-1.
61. (New) The method of claim 25, wherein said composition further comprises a dipeptidylpeptidase inhibitor, insulin or GLP-1.

62. (New) The method of claim 25, wherein said composition is conjointly administered either simultaneously, sequentially or separately with a dipeptidylpeptidase inhibitor, insulin or GLP-1.

63. (New) The method of claim 31, wherein said dipeptidylpeptidase is DPIV.

64. (New) The method of claim 33, wherein said therapeutic is a small organic molecule.

65. (New) The method of claim 33, wherein said composition further comprises an agent capable of inhibiting the degradation of a PYY Therapeutic.

66. (New) The method of claim 33, further comprising administering to an animal an agent capable of inhibiting the degradation of a PYY Therapeutic either simultaneously, sequentially or separately with said PYY or a PYY agonist.

67. (New) The method of claim 66, wherein said agent is co-administered with the PYY Therapeutic.

68. (New) The method of claim 21, wherein said therapeutic is a small organic molecule.

69. (New) The method of claim 21, wherein said composition further comprises an agent capable of inhibiting the degradation of a PYY Therapeutic.

70. (New) The method of claim 21, further comprising administering to an animal an agent capable of inhibiting the degradation of a PYY Therapeutic either simultaneously, sequentially or separately with said PYY or a PYY agonist.

71. (New) The method of claim 70, wherein said agent is co-administered with the PYY Therapeutic.

72. (New) The method of claim 23, wherein said therapeutic is a small organic molecule.

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D13

73. (New) The method of claim 23, wherein said composition further comprises an agent capable of inhibiting the degradation of a PYY Therapeutic.

74. (New) The method of claim 23, further comprising administering to an animal an agent capable of inhibiting the degradation of a PYY Therapeutic either simultaneously, sequentially or separately with said PYY or a PYY agonist.

75. (New) The method of claim 74, wherein said agent is co-administered with the PYY Therapeutic.

76. (New) The method of claim 23, wherein said PYY Therapeutic enhances or recovers glucose responsiveness.

77. (New) The method of claim 21, wherein said PYY Therapeutic enhances or recovers glucose responsiveness.

78. (New) The method of claim 33, wherein said PYY Therapeutic enhances or recovers glucose responsiveness.

79. (New) The method of claim 25, wherein the glucose responsive islets or cells produce insulin when treated with glucose.

80. (New) The method of claim 25, wherein the islets include fetal islets.

81. (New) The method of claim 25, wherein the cells include fetal pancreatic cells.

82. (New) The method of claim 25, wherein the islets include postpartem islets.

83. (New) The method of claim 25, wherein the cells include postpartem cells.

84. (New) The method of claim 25, wherein the cells include pancreatic β cells.

85. (New) The method of any one of the above claims 23, wherein said animal is a human.

C11
CONT.

See
D3
cont

See
D4

86.

(New) The method of any one of the above claims 25, wherein said animal is a human.

The claims presented above incorporate changes as indicated by the marked-up versions below.

13. (Amended) A method for altering the [differentiated state] glucose-responsiveness of a pancreatic islet or cell, comprising administering to the pancreatic islet or cell a PYY Therapeutic, thereby altering the glucose-responsiveness of the pancreatic islet or cell.

15. (Amended) The method of claim [14] 13, whereby [in said glucose responsive] administration of the PYY Therapeutic causes the islet or cell to produce[s] insulin when treated with glucose.

20. (Amended) The method of claim 13[, 17 or 19], wherein the cell is a pancreatic β cell.

21. (Amended) A method for [modifying] altering glucose metabolism in an animal identified as having a disease associated with abnormal glucose metabolism, comprising administering to the animal a [pharmaceutically] therapeutically effective amount of a composition including a PYY Therapeutic, thereby altering glucose metabolism in the animal.

23. (Amended) A method for treating a disease associated with altered glucose metabolism, comprising administering to an animal identified as having a disease associated with altered glucose metabolism a [pharmaceutically] therapeutically effective amount of a composition comprising a PYY Therapeutic, in an amount sufficient to increase the glucose responsiveness of a pancreatic islet or cell.

25. (Amended) A method for treating a disease associated with altered glucose metabolism, comprising administering to an animal a [pharmaceutically] therapeutically effective amount of a composition comprising [the] glucose responsive islets or cells obtained by the method of claim 13, 14, 15, 17, 19 or 20.

28. (Amended) The method of claim 23[, 24 or 25], wherein said disease is associated with a condition selected from [the group consisting of] insulin resistance, glucose intolerance or glucose non-responsiveness, hyperglycemia, obesity, hyperlipidemia and hyperlipoproteinemia in a subject.

29. (Amended) The method of claim 23[, 24 or 24], wherein said disease is Type II diabetes mellitus (NIDD).

30. (Amended) The method of any one of [the] claims 13-20 [29], wherein said [composition further comprises] PYY Therapeutic is administered together with a dipeptidylpeptidase inhibitor, insulin, or GLP-1.

31. (Amended) The method of any one of claims 13-20 [29], wherein said [composition] PYY Therapeutic is conjointly administered either simultaneously, sequentially, or separately with a dipeptidylpeptidase inhibitor, insulin, or GLP-1.

32. (Amended) The method of claim 30 [or 31], wherein said dipeptidylpeptidase is DPIV.

33. (Amended) A method for [obtaining functional] maintaining or restoring a function of pancreatic β cells, comprising:

administering to a pancreatic islet or cell a composition comprising a PYY Therapeutic, thereby maintaining or restoring a function of pancreatic β cells.

34. (Amended) The method of any one of claims 13-20 [33], wherein said [agonist] therapeutic is a small organic molecule.

35. (Amended) The method of any one of claims 13-20 [33], wherein said composition further comprises an agent capable of inhibiting the degradation of a PYY Therapeutic.

36. (Amended) The method of any one of claims 13-20 [33], further comprising [the step of] administering to an animal an agent capable of inhibiting the degradation of a PYY Therapeutic either simultaneously, sequentially or separately with said PYY or a PYY agonist.